Application No. 10/561,175 Docket No.: 37998-237505

Amendment dated January 25, 2008

Reply to Office Action of July 25, 2007

**AMENDMENTS TO THE CLAIMS** 

1-14. (Cancelled).

15. (Currently Amended) A pharmaceutical composition for sublingual, buccal or enteric

administration comprising one or more peptides having a molecular weight of less than 10 kDa

substances obtainable by hydrolysis with chymotrypsin or any other protease of an antigenic

structure which induces graft rejection, allergic reaction or autoimmune disease, said antigenic

structure being a protein.

16. (Previously Presented) The pharmaceutical composition of claim 15 wherein the amount

of said substance is in the range of 0.001 to 1000 µg.

17. (Previously Presented) The pharmaceutical composition of claim 16 wherein the amount

of said substance is in the range of 1 to 100  $\mu$ g.

18. (Cancelled).

19. (Cancelled).

20. (Cancelled).

21. (Cancelled).

22. (Currently Amended) The pharmaceutical composition of claim 15 comprising

additionally one or more substances selected from the group consisting of nucleoside triphosphates,

nucleoside diphosphates, nucleoside monophosphates, nucleic acids, peptide nucleic acids,

nucleosides or analogs thereof, immunosuppressive cytokines, compounds inducing expression of

immunoproteasomes, 1,25-dihydroxyvitamin D3 or analogs thereof, lipopolysaccharides,

endotoxins, heat shock proteins, thioredoxin with either NADPH or NADP-thioredoxin reductase,

3

Application No. 10/561,175
Amendment dated January 25, 2008

Reply to Office Action of July 25, 2007

dithiothreitol, adrenergic receptor agonists such as salbutanol, adrenergic receptor antagonists such as butoxamine, compounds that regulate the expression of the adhesion molecule ICAM-1, N-acetyl-L-cysteine, y-L-glutamyl-L-cysteinyl-glycine (reduced L-glutathione), alpha-2-macroglobulins, inducers for Foxp3 gene expression, flavonoids, isoflavonoids, pterocarpanoids, stilbenes such as resveratrol, tachykinin receptor antagonists, chymase inhibitors, a muco-adhesive agent for attaching the particle to the intestinal mucosal lining such as a plant lectin, zinc, zinc salts, polysaccharides, vitamins and bacterial lysates.

Docket No.: 37998-237505

- 23. (Currently Amended) The pharmaceutical composition of claim 15 wherein the antigenic structure is selected from the group consisting of insulin, thyroglobulin, thyroid peroxidase, type II collagen, gliadin, GAD65, proteolipid protein, S-antigen, acetylcholin receptor, haptenized colonic proteins, interphotoreceptor retinoid binding protein, myelin basic protein, myelin oligodendrocyte glycoprotein, peripheral nerve P2, cytoplasmic TSH receptor, intrinsic factor, lens proteins, platelets, nucleoproteins such as histones, heat shock proteins, MHC I, MHC II, MHC-peptide complexes, milk allergens, venom allergens, egg allergens, weed allergens, grass allergens, tree allergens, shrub allergens, flower allergens, grain allergens, fungi allergens, fruit allergens, berry allergens, nut allergens, seed allergens, bean allergens, fish allergens, shellfish allergens, meat allergens, spices allergens, insect allergens, mite allergens, animal allergens, animal dander allergens, allergens of Hevea brasiliensis, coagulation factors and blood group antigens.
- 24. (Withdrawn) A method for the treatment or prevention of graft rejection, allergic reaction or autoimmune disease in a mammal comprising administering to said mammal the pharmaceutical composition of claim 15.

4

Application No. 10/561,175 Docket No.: 37998-237505

Amendment dated January 25, 2008

Reply to Office Action of July 25, 2007

25. (Withdrawn) A method for eliciting oral tolerance or the induction of cells that may produce immunosuppressive cytokines selected from the group consisting of TGF-beta, IL-4 and

IL-10 in a mammal, comprising administering to said mammal the pharmaceutical composition of

claim 15.

26. (Withdrawn) A process for the preparation of the pharmaceutical composition of claim

15 comprising:

(a) hydrolyzing with chymotrypsin or any other protease an antigenic structure which

induces graft rejection, allergic reaction or autoimmune disease to obtain at least one substance; and

(b) formulating the at least one substance for enteric, sublingual or enteric administration.

27. (Previously Presented) The pharmaceutical composition of claim 15 in a sublingual

formulation.

28. (Previously Presented) The pharmaceutical composition of claim 15 in a buccal

formulation.

29. (Previously Presented) The pharmaceutical composition of claim 15 in an enteric

formulation.

5